

Title (en)

End effector coupling arrangements for a surgical cutting and stapling instrument

Title (de)

Endeffektor-Kopplungsanordnungen für ein chirurgisches Schneid- und Klammerinstrument

Title (fr)

Agencements de couplage d'effecteur d'extrémité pour un instrument chirurgical de découpage et d'agrafage

Publication

**EP 2090245 B1 20180103 (EN)**

Application

**EP 09250381 A 20090213**

Priority

US 3181708 A 20080215

Abstract (en)

[origin: EP2090245A1] In various embodiments, a surgical stapling instrument can include a handle, a shaft extending from the handle, wherein the shaft defines an axis, and a disposable loading unit which is assembled to the shaft in a direction which is transverse to the shaft axis. Such a connection between the disposable loading unit and the shaft can prevent, or at least inhibit, the disposable loading unit from being unintentionally displaced proximally and/or distally relative to the shaft of the surgical instrument. The surgical stapling instrument and/or disposable loading unit can further include a threaded collar and/or detent assembly configured to hold the disposable loading unit in place. In various embodiments, a disposable loading unit can include a lockout feature which can prevent, or at least inhibit, an expended disposable loading unit from being reassembled to the elongated body of the surgical instrument.

IPC 8 full level

**A61B 17/072** (2006.01)

CPC (source: EP US)

**A61B 17/068** (2013.01 - US); **A61B 17/07207** (2013.01 - EP US); **A61B 17/105** (2013.01 - US); **A61B 17/3205** (2013.01 - US); **A61B 17/3209** (2013.01 - US); **A61B 2017/00473** (2013.01 - EP US); **A61B 2017/07214** (2013.01 - EP US); **A61B 2017/2931** (2013.01 - EP US)

Citation (examination)

- WO 0226143 A1 20020404 - APPLIED MEDICAL RESOURCES [US], et al
- EP 1563792 A1 20050817 - TYCO HEALTHCARE [US]

Cited by

AU2012230057B2; EP2529681A1; AU2011202954B2; EP2949275A3; EP3167819A1; EP3446644A1; CN106413581A; EP3338716A1; EP3338690A3; EP3735920A3; EP2923657A1; CN109475368A; EP3463123A4; EP3042620A3; EP2777529A1; EP2777530A1; EP2777535A1; CN104042275A; AU2014201121B2; WO2012125633A1; WO2015148117A1; EP2898837A1; JP2015139704A; EP3173029A1; WO2018118613A1; WO2018118502A1; WO2012166476A1; WO2015041845A3; US9700309B2; US9782169B2; US9901346B2; US9901342B2; US9901344B2; US9901345B2; US9980729B2; US9993258B2; US9999426B2; US10004505B2; US10022126B2; US10226250B2; US10245029B2; US10245030B2; US10307163B2; US10368864B2; US10413291B2; US10433837B2; US10470764B2; US10653413B2; US10675035B2; US9642620B2; US9814462B2; US9913643B2; US9987000B2; US10052044B2; US10206605B2; US10327767B2; US10363036B2; US10390841B2; US10542979B2; US10548504B2; US10646222B2; US10675024B2; US10702270B2; US10980539B2; US11000278B2; US11369375B2; US9668728B2; US9668729B2; US9750498B2; US9795381B2; US9814463B2; US9888921B2; US9962158B2; 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US11064998B2; US11103248B2; US11607240B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

**EP 2090245 A1 20090819; EP 2090245 B1 20180103;** BR PI0901508 A2 20100126; CN 101507623 A 20090819; CN 101507623 B 20150121;  
EP 2465441 A2 20120620; EP 2465441 A3 20130424; EP 2465441 B1 20180103; EP 2465445 A2 20120620; EP 2465445 A3 20130424;  
EP 2465445 B1 20180103; JP 2009189844 A 20090827; PL 2090245 T3 20180629; PL 2465441 T3 20180629; PL 2465445 T3 20180629;  
RU 2009105140 A 20100820; RU 2489975 C2 20130820; US 10058327 B2 20180828; US 10835250 B2 20201117;  
US 2009206131 A1 20090820; US 2011132964 A1 20110609; US 2015060521 A1 20150305; US 2015201935 A1 20150723;  
US 2016000439 A1 20160107; US 2016000440 A1 20160107; US 2018103954 A1 20180419; US 2021100553 A1 20210408;  
US 8875972 B2 20141104; US 9839429 B2 20171212; US 9913647 B2 20180313

DOCDB simple family (application)

**EP 09250381 A 20090213;** BR PI0901508 A 20090216; CN 200910007816 A 20090216; EP 12157681 A 20090213; EP 12158918 A 20090213;  
JP 2009032019 A 20090213; PL 09250381 T 20090213; PL 12157681 T 20090213; PL 12158918 T 20090213; RU 2009105140 A 20090213;  
US 201113027641 A 20110215; US 201414528626 A 20141030; US 201514672620 A 20150330; US 201514849125 A 20150909;  
US 201514849151 A 20150909; US 201715793527 A 20171025; US 202017069392 A 20201013; US 3181708 A 20080215